

CLAIM AMENDMENTS

Claim Amendment Summary

Claims pending

- Before this Amendment: Claims 1-61.
- After this Amendment: Claims 1-3, 6, 8-10, 12, 15-20, 22-25, 27-29, 31, 34-39, 41-56, and 59-65

Canceled claims: 4, 5, 7, 11, 13, 14, 21, 26, 30, 32, 33, 40, 57, and 58

Amended claims: 1-3, 6, 8-10, 12, 15-20, 22-25, 27-29, 31, 34-39, 41-56, and 59-61

New claims: 62-65

Claims:

1. (Currently Amended) A method comprising, ~~when a substantially rectangular target screen is proportionately wider and has a different aspect ratio than a substantially rectangular original screen that has a resizing point along a horizontal axis thereof such that a perpendicular line there from intersects an original graphic data object thereon:~~

identifying an original graphic data object rendered in association with a substantially rectangular original screen having a horizontal axis and a vertical axis, wherein the original screen has a resizing point on the horizontal axis such

that a line extending through the resizing point and parallel to the vertical axis intersects the original graphic data object;

obtaining a proportionate graphic data object by proportionally increasing
modifying the size of the original graphic data object to obtain a target graphic
data object on the target screen; and

obtaining a target graphic data object by adding a stretch distance to the
width of the target-proportionate graphic data object; and

rendering the target graphic data object in association with a on the target
screen, wherein the target screen has a different aspect ratio than the original
screen.

2. (Currently Amended) The method as defined in Claim 1, wherein
the ~~proportionally increasing~~ modifying the size of the original graphic data
object comprises proportionally ~~increasing~~ modifying the size of the original
graphic data object by a height-ratio of the target screen height to the original
screen height ~~to obtain a target graphic data object on the target screen.~~

3. (Currently Amended) The method as defined in Claim 1, further comprising:

calculating a height ratio as the ratio of the target screen height to the original screen height;

calculating a proportionate width as the product of the height ratio and the width of the original screen; and

calculating wherein the stretch distance as the difference between is calculated by subtracting the product of the height ratio and the width of the original screen from the width of the target screen and the proportionate width.

4-5. (Canceled)

6. (Currently Amended) The method as defined in Claim 1, further comprising:

calculating display coordinates by rounding to an integer value, coordinates associated with the target graphic data object, thereby potentially modifying ~~increasing the size of the target graphic data object on the target screen by rounding up to an integer value the coordinates of the target graphic data object on the target screen; and~~

~~outputting a display that includes the target graphic data object~~ displayed at the display coordinates on the target screen.

7. (Canceled)

8. (Currently Amended) A method comprising, ~~when a substantially rectangular target screen is proportionately wider and has a different aspect ratio than a substantially rectangular original screen that has a resizing point along an x-axis thereof such that a perpendicular line there from intersects a substantially rectangular original graphic data object thereon:~~

identifying a substantially rectangular first original graphic data object rendered in association with a substantially rectangular original screen having an x-axis, wherein the original screen has a resizing point on the x-axis such that a

line extending through the resizing point and perpendicular to the x-axis intersects the first original graphic data object;

calculating a height ratio as the ratio of a target screen height to the original screen height;

obtaining a first proportionate graphic data object by multiplying each of the height, width, distance from the top edge, and distance from the left edge of the first original graphic data object by a the height ratio of the target screen height to the original screen height to obtain a target graphic data object on the target screen; and

calculating adding a stretch distance to the width of the target graphic data object on the target screen that is calculated by subtracting the product of the height ratio and the width of the original screen from the width of the target screen;

obtaining a first target graphic data object by adding the stretch distance to the width of the first proportionate graphic data object; and

rendering the first target graphic data object in association with the target screen, wherein the target screen has a different aspect ratio than the original screen.

9. (Currently Amended) The method as defined in Claim 8, ~~wherein~~
further comprising:

identifying a substantially rectangular second original graphic data object
rendered in association with the original screen ~~includes another said original~~
~~graphic data object having, wherein the second original graphic data object has~~
a right edge to the left of the ~~perpendicular line~~ extending through the resizing
point and perpendicular to the x-axis; and

obtaining a second proportionate graphic data object by the method
~~further comprises multiplying each of the height, width, distance from the top~~
~~edge, and distance from the left edge of the another said second original graphic~~
data object by a the height ratio; and

rendering the second proportionate graphic data object in association with
~~of the target screen height to the original screen height to obtain an another said~~
~~target graphic data object on the target screen.~~

10. (Currently Amended) The method as defined in Claim 8, ~~wherein~~
further comprising:

identifying a substantially rectangular second original graphic data object
rendered in association with the original screen ~~includes another said original~~
~~graphic data object having,~~ wherein the second original graphic data object has
a left edge to the left ~~right~~ of the perpendicular line extending through the
resizing point and perpendicular to the x-axis; and

obtaining a second proportionate graphic data object by the method
~~further comprises:~~

multiplying each of the height, width, distance from the top edge, and
distance from the left ~~right~~ edge of the another said ~~second~~ original graphic data
object by a ~~the~~ height ratio; and

rendering the second proportionate graphic data object in association with
~~of the target screen height to the original screen height to obtain an another said~~
~~target graphic data object on the target screen; and~~

~~adding the stretch distance to the width of the another said target graphic~~
~~data object on the target screen.~~

11. (Canceled)

12. (Currently Amended) The method as defined in Claim 8, wherein the first original graphic data object on the original screen is designated as being disproportionately resizable because the line extending through the resizing point and perpendicular to the x-axis intersects the first original graphic data object.

13-14. (Canceled)

15. (Currently Amended) A method according to Claim 8, further comprising:

obtaining graphic characteristics for and text attached to the first original graphic data object on the original screen;

~~reformatting~~ repositioning the attached text to correspond to the first target graphic data object on the target screen; and

applying the graphic characteristics for the first original graphic data object on the original screen ~~on to~~ the first target graphic data object on the target screen.

16. (Currently Amended) A method according to Claim 15, wherein the repositioning further comprises maintaining the ~~attached~~ text within the opposing top and bottom edges and the opposing left and right edges of the first target graphic data object ~~on the target screen~~.

17. (Currently Amended) A method according to Claim 15, wherein the ~~obtaining~~ the graphic characteristics further comprises obtaining a fill pattern.

18. (Currently Amended) A method according to Claim 15, wherein the ~~obtaining~~ the graphic characteristics further comprises obtaining a color designation.

19. (Currently Amended) A method according to Claim 15, wherein the ~~obtaining~~ the graphic characteristics further comprises obtaining a border style of the first original graphic data object ~~on the original screen~~.

20. (Currently Amended) The method as defined in Claim 8, further comprising:

calculating display coordinates by rounding to an integer value, coordinates associated with the first target graphic data object, thereby potentially modifying increasing the size of the first target graphic data object on the target screen by rounding to an integer value the coordinates of the target graphic data object on the target screen; and

outputting a display that includes the first target graphic data object displayed at the display coordinates on the target screen.

21. (Canceled)

22. (Currently Amended) A method comprising, ~~when a substantially rectangular target screen is proportionately higher and has a different aspect ratio than a substantially rectangular original screen that has a resizing point along a y axis thereof such that a perpendicular line there from intersects an original graphic data object thereon:~~

identifying an original graphic data object rendered in association with a substantially rectangular original screen having a y-axis, wherein the original screen has a resizing point on the y-axis such that a line extending through the resizing point and perpendicular to the y-axis intersects the first original graphic data object;

obtaining a proportionate graphic data object by proportionally increasing
modifying the size of the original graphic data object to obtain a target graphic data object on the target screen; and

obtaining a target graphic data object by adding a stretch distance to the height of the target proportionate graphic data; and

rendering the target graphic data object in association with the object on the target screen, wherein the target screen has a different aspect ratio than the original screen.

23. (Currently Amended) The method as defined in Claim 22, wherein ~~the proportionally increasing~~ modifying the size of the original graphic data object comprises proportionally ~~increasing~~ modifying the size of the original graphic data object by a width ~~ratio~~ of the target screen width to the original screen width ~~to obtain a target graphic data object on the target screen.~~

24. (Currently Amended) The method as defined in ~~Claim 23~~ Claim 22, further comprising:

calculating a width ratio as the ratio of the target screen width to the original screen width;

calculating a proportionate height as the product of the width ratio and the height of the original screen; and

calculating wherein the stretch distance as the difference between is calculated by subtracting the product of the width ratio and the height of the original screen from the height of the target screen and the proportionate height.

25. (Currently Amended) The method as defined in—Claim—23
Claim 22, further comprising:

calculating display coordinates by rounding to an integer value,
coordinates associated with the target graphic data object, thereby potentially
modifying increasing the size of the target graphic data object on the target
screen by rounding to an integer value the coordinates of the target graphic data
object on the target screen; and

outputting a display that includes the target graphic data object displayed
at the display coordinates on the target screen.

26. (Canceled)

27. (Currently Amended) A method comprising, ~~when a substantially~~
~~rectangular target screen is proportionately higher and has a different aspect~~
~~ratio than a substantially rectangular original screen that has a resizing point~~
~~along a y axis thereof such that a perpendicular line there from intersects a~~
~~substantially rectangular original graphic data object thereon:~~

identifying a substantially rectangular first original graphic data object
rendered in association with a substantially rectangular original screen having a
y-axis, wherein the original screen has a resizing pint on the y-axis such that a

line extending through the resizing pint and perpendicular to the y-axis intersects the first original graphic data object;

calculating a width ratio as the ratio of a target screen width to the original screen width;

obtaining a first proportionate graphic data object by multiplying each of the height, width, distance from the top edge, and distance from the left edge of the first original graphic data object by a~~the width ratio of the target screen width to the original screen width to obtain a target graphic data object on the target screen;~~ and

calculating~~adding a stretch distance to the height of the target graphic data object on the target screen that is calculated by subtracting the product of the width ratio and the height of the original screen from the height of the target screen;~~

obtaining a first target graphic data object by adding the stretch distance to the height of the first proportionate graphic data object; and

rendering the first target graphic data object in association with the target screen, wherein the target screen has a different aspect ratio than the original screen.

28. (Currently Amended) The method as defined in Claim 27, wherein further comprising:

identifying a substantially rectangular second original graphic data object rendered in association with the original screen~~includes another said original graphic data object having, wherein the second original graphic data object has a top~~ bottom edge above of the perpendicular line extending through the resizing point and perpendicular to the y-axis; and

obtaining a second proportionate graphic data object by ~~the method further comprises multiplying each of the height, width, distance from the top edge, and distance from the left edge of the another said~~ second original graphic data object by a the width ratio; and

rendering the second proportionate graphic data object in association with ~~of the target screen width to the original screen width to obtain an another said target graphic data object on the target screen.~~

29. (Currently Amended) The method as defined in Claim 27, wherein further comprising:

identifying a substantially rectangular second original graphic data object rendered in association with the original screen ~~includes another said original graphic data object having,~~ wherein the second original graphic data object has a top edge below the perpendicular line extending through the resizing point and perpendicular to the y-axis; and

obtaining a second proportionate graphic data object by the method ~~further comprises:~~

multiplying each of the height, width, distance from the top ~~bottom edge,~~ and distance from the left edge of the another said ~~second~~ original graphic data object by a ~~the~~ width ratio; and

rendering the second proportionate graphic data object in association with ~~of the target screen width to the original screen width to obtain an another said target graphic data object on the target screen; and~~

~~adding the stretch distance to the height of the another said target graphic data object on the target screen.~~

30. (Canceled)

31. (Currently Amended) The method as defined in Claim 27, wherein:

the first original graphic data object ~~on the original screen~~ is designated as being disproportionately resizable because the line extending through the resizing point and perpendicular to the y-axis intersects the first original graphic data object.

32. (Canceled)

33. (Canceled)

34. (Currently Amended) A method according to Claim 27, further comprising:

obtaining graphic characteristics for and text attached to the first original graphic data object ~~on the original screen~~;

~~reformatting~~ repositioning the attached text to correspond to the first target graphic data object ~~on the target screen~~; and

applying the graphic characteristics for the first original graphic data object ~~on the original screen~~ ~~on the~~ to the first target graphic data object ~~on the target screen~~.

35. (Currently Amended) A method according to Claim 34, wherein the repositioning further comprises maintaining the ~~attached~~ text within the opposing top and bottom edges and within the opposing left and right edges of the first target graphic data object ~~on the target screen~~.

36. (Currently Amended) A method according to Claim 34, wherein the ~~obtaining~~ the graphic characteristics further comprises obtaining a fill pattern.

37. (Currently Amended) A method according to Claim 34, wherein the ~~obtaining~~ the graphic characteristics further comprises obtaining a color designation.

38. (Currently Amended) A method according to Claim 34, wherein the ~~obtaining~~ the graphic characteristics further comprises obtaining a border style of the first original graphic data object ~~on the original screen~~.

39. (Currently Amended) The method as defined in Claim 27, further comprising:

calculating display coordinates by rounding to an integer value, coordinates associated with the first target graphic data object, thereby potentially modifying increasing the size of the first target graphic data object on the target screen by rounding to an integer value the coordinates of the target graphic data object on the target screen; and

outputting a display that includes the first target graphic data object displayed at the display coordinates on the target screen.

40. (Canceled)

41. (Currently Amended) A computer readable media comprising computer-readable instructions which, when executed by a computer, performs steps that include computing system, direct the computing system to transform an original screen to a target screen by:

when an original screen is to be transformed into a target screen of a different aspect ratio, wherein:

identifying the original screen and the target screen, wherein:

the original and target screens each have opposing top and bottom edges with a respective height there between and opposing left and right edges with a respective width there between;

identifying an original graphic data object on the original screen, ~~wherein is designated as being disproportionately resizable;~~

the original graphic data object has opposing top and bottom edges with a respective height there between ~~each being respectively parallel to and having a respective distance from the opposing top and bottom edges of the original screen;~~ and

~~the original graphic data object has opposing left and right edges with a respective width there between each being respectively parallel to and having a respective distance from the opposing left and right edges of the original screen;~~

~~when in an event that~~ the target screen is proportionately wider than the original screen;

~~identifying and~~ a resizing point ~~is along a x-axis a horizontal axis of~~ the original screen;

determining that the original graphic data object is disproportionately resizable because such that a perpendicular line through the resizing point and perpendicular to the horizontal axis there from intersects the original graphic data object; object;

calculating a height ratio equal to the ratio of the height of the target screen to the height of the original screen;

obtaining a proportionate data object by multiplying each of the height, width, distance from the top edge, and distance from the left edge of the original graphic data object by a~~the height ratio of the target screen height to the original screen height to obtain a target graphic data object on the target screen;~~

calculating a stretch distance by subtracting the product of the height ratio and the width of the original screen from the width of the target screen; and

obtaining a target data object by adding the stretch distance to the width of the target~~proportionate~~ graphic data object on the target screen;

in an event that ~~when the target screen is proportionately higher than the original screen;~~

identifying a resizing point is~~along a y-axis~~a vertical axis of the original screen;

determining that the original graphic data object is disproportionately resizable because a line through the resizing point and perpendicular to the vertical axis~~such that the perpendicular line intersects the original graphic data object;~~ object;

calculating a width ratio equal to the ratio of the width of the target screen to the width of the original screen;

obtaining a proportionate data object by multiplying each of the height, width, distance from the top edge, and distance from the left edge of the original graphic data object by a~~the~~ width ratio of the target screen width to the original screen width to obtain a target graphic data object on the target screen;

calculating a stretch distance by subtracting the product of the width ratio and the height of the original screen from the height of the target screen; and

obtaining a target data object by adding the stretch distance to the height of the~~target~~ proportionate~~graphic data object on the target screen; and~~

rendering the target data object in association with the target screen.

42. (Currently Amended) The computer readable media according to Claim 41, further comprising:

obtaining graphic characteristics for and text attached to the original graphic data object ~~on the original screen;~~

~~reformatting~~ repositioning the attached text to correspond to the target graphic data object ~~on the target screen;~~ and

applying the graphic characteristics ~~for the original graphic data object on the original screen on~~ to the target graphic data object ~~on the target screen.~~

43. (Currently Amended) The computer readable media according to Claim 42, wherein the repositioning ~~further comprises~~ maintaining the attached text within the opposing top and bottom edges and within the opposing left and right edges of the target graphic data object ~~on the target screen.~~

44. (Currently Amended) The computer readable media according to Claim 42, wherein ~~the obtaining~~ the graphic characteristics ~~further comprises~~ obtaining a fill pattern.

45. (Currently Amended) The computer readable media according to Claim 42, wherein the obtaining the graphic characteristics ~~further comprises~~ obtaining a color designation.

46. (Currently Amended) The computer readable media according to Claim 42, wherein the obtaining the graphic characteristics ~~further comprises~~ obtaining a border style of the original graphic data object ~~on the original screen~~.

47. (Currently Amended) The computer readable media as defined in Claim 41, further comprising:

calculating display coordinates associated with the target graphic data object ~~increasing the size of the target graphic data object on the target screen~~ by rounding to an integer ~~value the~~ value coordinates of the target graphic data object ~~on the target screen~~, thereby potentially modifying the size of the target graphic data object; and

outputting a display that includes the target graphic data object displayed at the display coordinates on the target screen.

48. (Currently Amended) A computer readable media comprising computer-readable instructions which, when executed by a computer, performs steps that include:

determining that:

an original screen is to be transformed into a target screen of a different aspect ratio, wherein the original and target screens each have opposing top and bottom edges with a respective height there between and opposing left and right edges with a respective width there between;

a resizing point is defined on the original screen; and

a resizing line perpendicular to one ~~said edge of the edges~~ of the original screen intersects:

the resizing point; and

one or more ~~said-original~~ points on at least one edge of an original graphic data object having a plurality of ~~said-original~~ points each having respective distances from the opposing top and bottom edges of the original screen and from the opposing left and right edges of the original screen, wherein, based on the intersection of the resizing line with the one or more original points, the original graphic data object ~~on the original screen~~ is designated as being disproportionately resizable;

in an event that ~~when~~ the target screen is proportionately wider than the original screen and the resizing point is along a ~~x-axis~~ horizontal axis of the original screen:

multiplying a location of each selected original point of the plurality of original points of the original graphic data object by a height ratio equal to the ratio of the target screen height to the original screen height to obtain corresponding proportional points, respectively, a respective target graphic data object point;

calculating a stretch distance by subtracting the product of the height ratio and the width of the original screen from the width of the target screen;

for each of the plurality of original points original point that is to the right of a line perpendicular to the x axis at the resizing point the resizing line, adding the stretch distance to the distance of the corresponding target-proportional point from the left edge of the target screen; and

for each of the plurality of original points original point that intersects a line perpendicular to the x axis at the resizing point the resizing line, transforming the corresponding target-proportional point into a target object line that is perpendicular to the perpendicular-resizing line and having the distance of a length equal to the stretch distance;

in an event that when the target screen is proportionately higher than the original screen and the resizing point is along a y-axis-vertical axis of the original screen:

multiplying a location of each original point of the original graphic data object of the plurality of original points by a width ratio equal to the ratio of the target screen width to the original screen width to obtain corresponding proportional points, respectively, a respective target graphic data object point;

calculating a stretch distance by subtracting the product of the width ratio and the height of the original screen from the height of the target screen;

for each of the plurality of original points original point that is to the below a line perpendicular to the y axis at the resizing point the resizing line, adding the stretch distance to the distance of the corresponding target proportional point from the top edge of the target screen; and

for each of the plurality of original points original point that intersects a line perpendicular to the y axis at the resizing point the resizing line, transforming the corresponding target proportional point into a target object line that is parallel to the opposing left and right edges of the target screen and having a length equal to the distance of the stretch distance; and

forming a target graphic data object on the target screen from the target proportional points and the target object lines.

49. (Currently Amended) The computer readable media according to Claim 48, wherein the forming a the target graphic data object ~~on the target screen from the target points~~ further comprises:

obtaining graphic characteristics for and text attached to the original graphic data object ~~on the original screen~~;

reformatting repositioning the attached text to correspond to the target graphic data object ~~on the target screen~~; and

applying the graphic characteristics ~~for the original graphic data object on the original screen on~~ to the target graphic data object ~~on the target screen~~.

50. (Currently Amended) The computer readable media according to Claim 49, wherein the repositioning ~~further comprises~~ maintaining the attached text within the opposing top and bottom edges and the opposing left and right edges of the target graphic data object ~~on the target screen~~.

51. (Currently Amended) The computer readable media according to Claim 49, wherein the obtaining the graphic characteristics ~~further comprises~~ obtaining a fill pattern.

52. (Currently Amended) The computer readable media according to Claim 49, wherein the obtaining the graphic characteristics ~~further~~ comprises obtaining a color designation.

53. (Currently Amended) The computer readable media according to Claim 49, wherein the obtaining the graphic characteristics ~~further~~ comprises obtaining a border style of the original graphic data object ~~on the original screen~~.

54. (Currently Amended) The computer readable media as defined in Claim 48, further comprising:

calculating display coordinates associated with the target graphic data object ~~increasing the size of the target graphic data object on the target screen~~ by rounding to an integer value ~~the value,~~ coordinates of the target graphic data object ~~on the target screen, thereby potentially modifying the size of the target~~ graphic data object; and

outputting a display that includes the target graphic data object displayed at the display coordinates on the target screen.

55. (Currently Amended) A computer graphics system for adjusting ~~an obtaining first and second target graphic data objects on a substantially rectangular target screen based on first and second original graphic data object in objects on a substantially rectangular original screen, the to obtain a target graphic data object on a substantially rectangular target screen having a different aspect ratio than that of the original screen, the computer graphics system comprising:~~

means for identifying a line perpendicular to an edge of the original screen, wherein the line projects from a resizing point on the edge;

means for determining that the first original graphic data object is proportionally resizable because the line does not intersect the first original graphic data object;

means for determining that the second original graphic data object is non-proportionally resizable because the line intersects the second original graphic data object;

means for proportionally increasing the size of resizing the first original graphic data object to obtain a first target graphic data object the target graphic data object on the target screen;

means for proportionally resizing the second original graphic data object to obtain a proportional graphic data object; and

means for non-proportionally increasing the size of resizing the proportional target graphic data object on the target screen by the addition of a stretch distance thereto to obtain a second target graphic data object where a line projecting from a resizing point on and perpendicular to an edge of the original screen intersects the original graphic data object.

56. (Currently Amended) The computer graphics system as defined in Claim 55, wherein:

the target screen is proportionally wider than the original screen; and
the stretch distance is added to either the width or the height of the target proportional graphic data object on the target screen.

57-58. (Canceled)

59. (Currently Amended) The computer graphics system as defined in Claim 55, further comprising:

means for obtaining graphic characteristics for and text ~~attached to~~
associated with the first original graphic data object ~~on the original screen;~~

means for ~~reformatting~~ repositioning the attached text to correspond to the first target graphic data object ~~on the target screen;~~

means for applying the graphic characteristics ~~for the original graphic data object on the original screen to the~~ first target graphic data object ~~on the target screen;~~ and

means for displaying the first target graphic data object on the target screen.

60. (Currently Amended) The computer graphics system as defined in ~~Claim 55~~ Claim 59, wherein the means for ~~reformatting further~~ repositioning comprises means for ~~maintaining~~ positioning the attached text within opposing top and bottom edges and opposing left and right edges of the first target graphic data object ~~on the target screen.~~

61. (Currently Amended) The computer graphics system as defined in Claim 55, further comprising means for calculating display coordinates associated with the first and second target graphic data objects ~~increasing the size of the target graphic data object on the target screen by~~ rounding to an integer value ~~the value,~~ coordinates of the first and second target graphic data object on the target screen objects, thereby potentially modifying the size of the first or second target graphic data objects.

62. (New) The method as defined in Claim 1, wherein the target screen is proportionately wider than the original screen.

63. (New) The computer graphics system as defined in Claim 55, wherein:

the target screen is proportionally higher than the original screen; and

the stretch distance is added to the height of the proportional graphic data object.

64. (New) The computer graphics system as defined in Claim 55, further comprising:

means for obtaining graphic characteristics for and text associated with the second original graphic data object;

means for repositioning the text to correspond to the second target graphic data object;

means for applying the graphic characteristics to the second target graphic data object; and

means for displaying the second target graphic data object on the target screen.

65. (New) The computer graphics system as defined in Claim 64, wherein the means for repositioning comprises means for positioning the text within opposing top and bottom edges and opposing left and right edges of the second target graphic data object.